



RAW SEQUENCE LISTING ERROR REPORT

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Application Serial Number:

09/442.489D

Source:

1600

Date Processed by STIC:

9-30-03

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FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

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1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry directly to:
U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
Or
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4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mallroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 04/24/2003

1600

PAGE: 1

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/442,489D

DATE: 09/30/2003
TIME: 16:00:35

INPUT SET: S37023.raw

This Raw Listing contains the General
Information Section and those Sequences
containing ERRORS.

RECEIVED
OCT 02 2003
TECH CENTER 1600/2900

Does Not Comply
Corrected Diskette Needed

SEQUENCE LISTING

(1) General Information:

(i) APPLICANT: ALBERTSEN, HANS
ANAND, RAKESH
CARLSON, MARY
GRODEN, JOANNA
HEDGE, PHILIP J.
JOSLYN, GEOFF
KINZLER, KENNETH
MARKHAM, ALEXANDER F.
NAKAMURA, YUSUKE
THLIVERIS, ANDREW

VOGELSTEIN, BERT

WHITE, RAYMOND L.

(ii) TITLE OF INVENTION: APC ANTIBODIES

(iii) NUMBER OF SEQUENCES: 154

(iv) CORRESPONDENCE ADDRESS:

(A) ADDRESSEE: Banner & Allegretti, LTD
(B) STREET: 1001 G Street, NW
(C) CITY: Washington
(D) STATE: D.C.
(E) COUNTRY: USA
(F) ZIP: 20001-4598

(v) COMPUTER READABLE FORM:

(A) MEDIUM TYPE: Floppy disk
(B) COMPUTER: IBM PC compatible
(C) OPERATING SYSTEM: PC-DOS/MS-DOS
(D) SOFTWARE: PatentIn Release #1.0, Version #1.25

(vi) CURRENT APPLICATION DATA:

(A) APPLICATION NUMBER: US 09/442,489
(B) FILING DATE: 18-NOV-1999
(C) CLASSIFICATION:

(vi) PRIOR APPLICATION DATA:

(A) APPLICATION NUMBER: US 08/452,654
(B) FILING DATE: 25-MAY-1995

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DATE: 09/30/2003
TIME: 16:00:36

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46 (vi) PRIOR APPLICATION DATA:
47 (A) APPLICATION NUMBER: US 08/289,548
48 (B) FILING DATE: 12-AUG-1994
49
50 (vi) PRIOR APPLICATION DATA:
51 (A) APPLICATION NUMBER: US 07/741,940
52 (B) FILING DATE: 08-AUG-1001
53
54
55 (viii) ATTORNEY/AGENT INFORMATION:
56 (A) NAME: Kagan, Sarah A.
57 (B) REGISTRATION NUMBER: 32,141
58 (C) REFERENCE/DOCKET NUMBER: 1107.035574
59
60 (ix) TELECOMMUNICATION INFORMATION:
61 (A) TELEPHONE: 202-508-9100
62 (B) TELEFAX: 202-508-9299
63
64

ERRORED SEQUENCES FOLLOW:

1761 (2) INFORMATION FOR SEQ ID NO:7:
1762
1763 (i) SEQUENCE CHARACTERISTICS:
--> 1764 (A) LENGTH: 2843 amino acids 2842 amino-acids
1765 (B) TYPE: amino acid
1766 (C) STRANDEDNESS: single
1767 (D) TOPOLOGY: linear
1768
1769 (ii) MOLECULE TYPE: protein
1770
1771 (vi) ORIGINAL SOURCE:
1772 (A) ORGANISM: Homo sapiens
1773
1774 (vii) IMMEDIATE SOURCE:
1775 (B) CLONE: APC
1776
1777
1778
1779 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:
1780
1781 Met Ala Ala Ala Ser Tyr Asp Gln Leu Leu Lys Gln Val Glu Ala Leu
1782 1 5 10 15
1783
1784 Lys Met Glu Asn Ser Asn Leu Arg Gln Glu Leu Glu Asp Asn Ser Asn
1785 20 25 30
1786
1787 His Leu Thr Lys Leu Glu Thr Glu Ala Ser Asn Met Lys Glu Val Leu
1788 35 40 45

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1789
1790      Lys Gln Leu Gln Gly Ser Ile Glu Asp Glu Ala Met Ala Ser Ser Gly
1791          50                      55                      60
1792
1793      Gln Ile Asp Leu Leu Glu Arg Leu Lys Glu Leu Asn Leu Asp Ser Ser
1794      65                      70                      75                      80
1795
1796      Asn Phe Pro Gly Val Lys Leu Arg Ser Lys Met Ser Leu Arg Ser Tyr
1797          85                      90                      95
1798
1799      Gly Ser Arg Glu Gly Ser Val Ser Ser Arg Ser Gly Glu Cys Ser Pro
1800          100                    105                    110
1801
1802      Val Pro Met Gly Ser Phe Pro Arg Arg Gly Phe Val Asn Gly Ser Arg
1803          115                    120                    125
1804
1805      Glu Ser Thr Gly Tyr Leu Glu Glu Leu Glu Lys Glu Arg Ser Leu Leu
1806          130                    135                    140
1807
1808      Leu Ala Asp Leu Asp Lys Glu Glu Lys Glu Lys Asp Trp Tyr Tyr Ala
1809      145                    150                    155                    160
1810
1811      Gln Leu Gln Asn Leu Thr Lys Arg Ile Asp Ser Leu Pro Thr Glu Asn
1812          165                    170                    175
1813
1814      Phe Ser Leu Gln Thr Asp Met Thr Arg Arg Gln Leu Glu Tyr Glu Ala
1815          180                    185                    190
1816
1817      Arg Gln Ile Arg Val Ala Met Glu Glu Gln Leu Gly Thr Cys Gln Asp
1818          195                    200                    205
1819
1820      Met Glu Lys Arg Ala Gln Arg Arg Ile Ala Arg Ile Gln Gln Ile Glu
1821          210                    215                    220
1822
1823      Lys Asp Ile Leu Arg Ile Arg Gln Leu Leu Gln Ser Gln Ala Thr Glu
1824      225                    230                    235                    240
1825
1826      Ala Glu Arg Ser Ser Gln Asn Lys His Glu Thr Gly Ser His Asp Ala
1827          245                    250                    255
1828
1829      Glu Arg Gln Asn Glu Gly Gln Gly Val Gly Glu Ile Asn Met Ala Thr
1830          260                    265                    270
1831
1832      Ser Gly Asn Gly Gln Gly Ser Thr Thr Arg Met Asp His Glu Thr Ala
1833          275                    280                    285
1834
1835      Ser Val Leu Ser Ser Ser Ser Thr His Ser Ala Pro Arg Arg Leu Thr
1836          290                    295                    300
1837
1838      Ser His Leu Gly Thr Lys Val Glu Met Val Tyr Ser Leu Leu Ser Met
1839      305                    310                    315                    320
1840
1841      Leu Gly Thr His Asp Lys Asp Asp Met Ser Arg Thr Leu Leu Ala Met

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1842		325		330		335
1843						
1844	Ser Ser Ser Gln Asp Ser Cys Ile Ser Met Arg Gln Ser Gly Cys Leu					
1845		340		345		350
1846						
1847	Pro Leu Leu Ile Gln Leu Leu His Gly Asn Asp Lys Asp Ser Val Leu					
1848		355		360		365
1849						
1850	Leu Gly Asn Ser Arg Gly Ser Lys Glu Ala Arg Ala Arg Ala Ser Ala					
1851		370		375		380
1852						
1853	Ala Leu His Asn Ile Ile His Ser Gln Pro Asp Asp Lys Arg Gly Arg					
1854		385		390		395
1855						
1856	Arg Glu Ile Arg Val Leu His Leu Leu Glu Gln Ile Arg Ala Tyr Cys					
1857		405		410		415
1858						
1859	Glu Thr Cys Trp Glu Trp Gln Glu Ala His Glu Pro Gly Met Asp Gln					
1860		420		425		430
1861						
1862	Asp Lys Asn Pro Met Pro Ala Pro Val Glu His Gln Ile Cys Pro Ala					
1863		435		440		445
1864						
1865	Val Cys Val Leu Met Lys Leu Ser Phe Asp Glu Glu His Arg His Ala					
1866		450		455		460
1867						
1868	Met Asn Glu Leu Gly Gly Leu Gln Ala Ile Ala Glu Leu Leu Gln Val					
1869		465		470		475
1870						
1871	Asp Cys Glu Met Tyr Gly Leu Thr Asn Asp His Tyr Ser Ile Thr Leu					
1872		485		490		495
1873						
1874	Arg Arg Tyr Ala Gly Met Ala Leu Thr Asn Leu Thr Phe Gly Asp Val					
1875		500		505		510
1876						
1877	Ala Asn Lys Ala Thr Leu Cys Ser Met Lys Gly Cys Met Arg Ala Leu					
1878		515		520		525
1879						
1880	Val Ala Gln Leu Lys Ser Glu Ser Glu Asp Leu Gln Gln Val Ile Ala					
1881		530		535		540
1882						
1883	Ser Val Leu Arg Asn Leu Ser Trp Arg Ala Asp Val Asn Ser Lys Lys					
1884		545		550		555
1885						
1886	Thr Leu Arg Glu Val Gly Ser Val Lys Ala Leu Met Glu Cys Ala Leu					
1887		565		570		575
1888						
1889	Glu Val Lys Lys Glu Ser Thr Leu Lys Ser Val Leu Ser Ala Leu Trp					
1890		580		585		590
1891						
1892	Asn Leu Ser Ala His Cys Thr Glu Asn Lys Ala Asp Ile Cys Ala Val					
1893		595		600		605
1894						

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1895	Asp	Gly	Ala	Leu	Ala	Phe	Leu	Val	Gly	Thr	Leu	Thr	Tyr	Arg	Ser	Gln
1896		610					615					620				
1897																
1898	Thr	Asn	Thr	Leu	Ala	Ile	Ile	Glu	Ser	Gly	Gly	Gly	Ile	Leu	Arg	Asn
1899	625					630					635					640
1900																
1901	Val	Ser	Ser	Leu	Ile	Ala	Thr	Asn	Glu	Asp	His	Arg	Gln	Ile	Leu	Arg
1902					645					650					655	
1903																
1904	Glu	Asn	Asn	Cys	Leu	Gln	Thr	Leu	Leu	Gln	His	Leu	Lys	Ser	His	Ser
1905				660					665					670		
1906																
1907	Leu	Thr	Ile	Val	Ser	Asn	Ala	Cys	Gly	Thr	Leu	Trp	Asn	Leu	Ser	Ala
1908			675					680					685			
1909																
1910	Arg	Asn	Pro	Lys	Asp	Gln	Glu	Ala	Leu	Trp	Asp	Met	Gly	Ala	Val	Ser
1911		690					695					700				
1912																
1913	Met	Leu	Lys	Asn	Leu	Ile	His	Ser	Lys	His	Lys	Met	Ile	Ala	Met	Gly
1914	705					710					715					720
1915																
1916	Ser	Ala	Ala	Ala	Leu	Arg	Asn	Leu	Met	Ala	Asn	Arg	Pro	Ala	Lys	Tyr
1917					725					730					735	
1918																
1919	Lys	Asp	Ala	Asn	Ile	Met	Ser	Pro	Gly	Ser	Ser	Leu	Pro	Ser	Leu	His
1920				740					745					750		
1921																
1922	Val	Arg	Lys	Gln	Lys	Ala	Leu	Glu	Ala	Glu	Leu	Asp	Ala	Gln	His	Leu
1923			755					760					765			
1924																
1925	Ser	Glu	Thr	Phe	Asp	Asn	Ile	Asp	Asn	Leu	Ser	Pro	Lys	Ala	Ser	His
1926		770					775					780				
1927																
1928	Arg	Ser	Lys	Gln	Arg	His	Lys	Gln	Ser	Leu	Tyr	Gly	Asp	Tyr	Val	Phe
1929	785					790					795					800
1930																
1931	Asp	Thr	Asn	Arg	His	Asp	Asp	Asn	Arg	Ser	Asp	Asn	Phe	Asn	Thr	Gly
1932					805					810					815	
1933																
1934	Asn	Met	Thr	Val	Leu	Ser	Pro	Tyr	Leu	Asn	Thr	Thr	Val	Leu	Pro	Ser
1935				820					825					830		
1936																
1937	Ser	Ser	Ser	Ser	Arg	Gly	Ser	Leu	Asp	Ser	Ser	Arg	Ser	Glu	Lys	Asp
1938				835				840					845			
1939																
1940	Arg	Ser	Leu	Glu	Arg	Glu	Arg	Gly	Ile	Gly	Leu	Gly	Asn	Tyr	His	Pro
1941		850					855					860				
1942																
1943	Ala	Thr	Glu	Asn	Pro	Gly	Thr	Ser	Ser	Lys	Arg	Gly	Leu	Gln	Ile	Ser
1944	865					870					875					880
1945																
1946	Thr	Thr	Ala	Ala	Gln	Ile	Ala	Lys	Val	Met	Glu	Glu	Val	Ser	Ala	Ile
1947					885					890					895	

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1948
1949 His Thr Ser Gln Glu Asp Arg Ser Ser Gly Ser Thr Thr Glu Leu His
1950                      900                      905                      910
1951
1952 Cys Val Thr Asp Glu Arg Asn Ala Leu Arg Arg Ser Ser Ala Ala His
1953                      915                      920                      925
1954
1955 Thr His Ser Asn Thr Tyr Asn Phe Thr Lys Ser Glu Asn Ser Asn Arg
1956                      930                      935                      940
1957
1958 Thr Cys Ser Met Pro Tyr Ala Lys Leu Glu Tyr Lys Arg Ser Ser Asn
1959 945                      950                      955                      960
1960
1961 Asp Ser Leu Asn Ser Val Ser Ser Ser Asp Gly Tyr Gly Lys Arg Gly
1962                      965                      970                      975
1963
1964 Gln Met Lys Pro Ser Ile Glu Ser Tyr Ser Glu Asp Asp Glu Ser Lys
1965                      980                      985                      990
1966
1967 Phe Cys Ser Tyr Gly Gln Tyr Pro Ala Asp Leu Ala His Lys Ile His
1968                      995                      1000                      1005
1969
1970 Ser Ala Asn His Met Asp Asp Asn Asp Gly Glu Leu Asp Thr Pro Ile
1971 1010                      1015                      1020
1972
1973 Asn Tyr Ser Leu Lys Tyr Ser Asp Glu Gln Leu Asn Ser Gly Arg Gln
1974 1025                      1030                      1035                      1040
1975
1976 Ser Pro Ser Gln Asn Glu Arg Trp Ala Arg Pro Lys His Ile Ile Glu
1977                      1045                      1050                      1055
1978
1979 Asp Glu Ile Lys Gln Ser Glu Gln Arg Gln Ser Arg Asn Gln Ser Thr
1980                      1060                      1065                      1070
1981
1982 Thr Tyr Pro Val Tyr Thr Glu Ser Thr Asp Asp Lys His Leu Lys Phe
1983                      1075                      1080                      1085
1984
1985 Gln Pro His Phe Gly Gln Gln Glu Cys Val Ser Pro Tyr Arg Ser Arg
1986 1090                      1095                      1100
1987
1988 Gly Ala Asn Gly Ser Glu Thr Asn Arg Val Gly Ser Asn His Gly Ile
1989 1105                      1110                      1115                      1120
1990
1991 Asn Gln Asn Val Ser Gln Ser Leu Cys Gln Glu Asp Asp Tyr Glu Asp
1992                      1125                      1130                      1135
1993
1994 Asp Lys Pro Thr Asn Tyr Ser Glu Arg Tyr Ser Glu Glu Glu Gln His
1995                      1140                      1145                      1150
1996
1997 Glu Glu Glu Glu Arg Pro Thr Asn Tyr Ser Ile Lys Tyr Asn Glu Glu
1998 1155                      1160                      1165
1999
2000 Lys Arg His Val Asp Gln Pro Ile Asp Tyr Ser Leu Lys Tyr Ala Thr

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	1170	1175	1180
2001			
2002			
2003	Asp Ile Pro Ser Ser Gln Lys Gln Ser Phe Ser Phe Ser Lys Ser Ser		
2004	1185	1190	1195 1200
2005			
2006	Ser Gly Gln Ser Ser Lys Thr Glu His Met Ser Ser Ser Ser Glu Asn		
2007		1205	1210 1215
2008			
2009	Thr Ser Thr Pro Ser Ser Asn Ala Lys Arg Gln Asn Gln Leu His Pro		
2010		1220	1225 1230
2011			
2012	Ser Ser Ala Gln Ser Arg Ser Gly Gln Pro Gln Lys Ala Ala Thr Cys		
2013		1235	1240 1245
2014			
2015	Lys Val Ser Ser Ile Asn Gln Glu Thr Ile Gln Thr Tyr Cys Val Glu		
2016		1250	1255 1260
2017			
2018	Asp Thr Pro Ile Cys Phe Ser Arg Cys Ser Ser Leu Ser Ser Leu Ser		
2019		1265	1270 1275 1280
2020			
2021	Ser Ala Glu Asp Glu Ile Gly Cys Asn Gln Thr Thr Gln Glu Ala Asp		
2022		1285	1290 1295
2023			
2024	Ser Ala Asn Thr Leu Gln Ile Ala Glu Ile Lys Glu Lys Ile Gly Thr		
2025		1300	1305 1310
2026			
2027	Arg Ser Ala Glu Asp Pro Val Ser Glu Val Pro Ala Val Ser Gln His		
2028		1315	1320 1325
2029			
2030	Pro Arg Thr Lys Ser Ser Arg Leu Gln Gly Ser Ser Leu Ser Ser Glu		
2031		1330	1335 1340
2032			
2033	Ser Ala Arg His Lys Ala Val Glu Phe Ser Ser Gly Ala Lys Ser Pro		
2034		1345	1350 1355 1360
2035			
2036	Ser Lys Ser Gly Ala Gln Thr Pro Lys Ser Pro Pro Glu His Tyr Val		
2037		1365	1370 1375
2038			
2039	Gln Glu Thr Pro Leu Met Phe Ser Arg Cys Thr Ser Val Ser Ser Leu		
2040		1380	1385 1390
2041			
2042	Asp Ser Phe Glu Ser Arg Ser Ile Ala Ser Ser Val Gln Ser Glu Pro		
2043		1395	1400 1405
2044			
2045	Cys Ser Gly Met Val Ser Gly Ile Ile Ser Pro Ser Asp Leu Pro Asp		
2046		1410	1415 1420
2047			
2048	Ser Pro Gly Gln Thr Met Pro Pro Ser Arg Ser Lys Thr Pro Pro Pro		
2049		1425	1430 1435 1440
2050			
2051	Pro Pro Gln Thr Ala Gln Thr Lys Arg Glu Val Pro Lys Asn Lys Ala		
2052		1445	1450 1455
2053			

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2054	Pro Thr Ala Glu Lys Arg Glu Ser Gly Pro Lys Gln Ala Ala Val Asn	
2055	1460	1465 1470
2056		
2057	Ala Ala Val Gln Arg Val Gln Val Leu Pro Asp Ala Asp Thr Leu Leu	
2058	1475	1480 1485
2059		
2060	His Phe Ala Thr Glu Ser Thr Pro Asp Gly Phe Ser Cys Ser Ser Ser	
2061	1490	1495 1500
2062		
2063	Leu Ser Ala Leu Ser Leu Asp Glu Pro Phe Ile Gln Lys Asp Val Glu	
2064	1505	1510 1515 1520
2065		
2066	Leu Arg Ile Met Pro Pro Val Gln Glu Asn Asp Asn Gly Asn Glu Thr	
2067	1525	1530 1535
2068		
2069	Glu Ser Glu Gln Pro Lys Glu Ser Asn Glu Asn Gln Glu Lys Glu Ala	
2070	1540	1545 1550
2071		
2072	Glu Lys Thr Ile Asp Ser Glu Lys Asp Leu Leu Asp Asp Ser Asp Asp	
2073	1555	1560 1565
2074	Asp Asp Ile Glu Ile Leu Glu Glu Cys Ile Ile Ser Ala Met Pro Thr	
2075	1570	1575 1580
2076		
2077	Lys Ser Ser Arg Lys Ala Lys Lys Pro Ala Gln Thr Ala Ser Lys Leu	
2078	1585	1590 1595 1600
2079		
2080	Pro Pro Pro Val Ala Arg Lys Pro Ser Gln Leu Pro Val Tyr Lys Leu	
2081	1605	1610 1615
2082		
2083	Leu Pro Ser Gln Asn Arg Leu Gln Pro Gln Lys His Val Ser Phe Thr	
2084	1620	1625 1630
2085		
2086	Pro Gly Asp Asp Met Pro Arg Val Tyr Cys Val Glu Gly Thr Pro Ile	
2087	1635	1640 1645
2088		
2089	Asn Phe Ser Thr Ala Thr Ser Leu Ser Asp Leu Thr Ile Glu Ser Pro	
2090	1650	1655 1660
2091		
2092	Pro Asn Glu Leu Ala Ala Gly Glu Gly Val Arg Gly Gly Ala Gln Ser	
2093	1665	1670 1675 1680
2094		
2095	Gly Glu Phe Glu Lys Arg Asp Thr Ile Pro Thr Glu Gly Arg Ser Thr	
2096	1685	1690 1695
2097		
2098	Asp Glu Ala Gln Gly Gly Lys Thr Ser Ser Val Thr Ile Pro Glu Leu	
2099	1700	1705 1710
2100		
2101	Asp Asp Asn Lys Ala Glu Glu Gly Asp Ile Leu Ala Glu Cys Ile Asn	
2102	1715	1720 1725
2103		
2104	Ser Ala Met Pro Lys Gly Lys Ser His Lys Pro Phe Arg Val Lys Lys	
2105	1730	1735 1740
2106		

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2107	Ile Met Asp Gln Val Gln Gln Ala Ser Ala Ser Ser Ser Ala Pro Asn
2108	1745 1750 1755 1760
2109	
2110	Lys Asn Gln Leu Asp Gly Lys Lys Lys Lys Pro Thr Ser Pro Val Lys
2111	1765 1770 1775
2112	
2113	Pro Ile Pro Gln Asn Thr Glu Tyr Arg Thr Arg Val Arg Lys Asn Ala
2114	1780 1785 1790
2115	
2116	Asp Ser Lys Asn Asn Leu Asn Ala Glu Arg Val Phe Ser Asp Asn Lys
2117	1795 1800 1805
2118	
2119	Asp Ser Lys Lys Gln Asn Leu Lys Asn Asn Ser Lys Asp Phe Asn Asp
2120	1810 1815 1820
2121	
2122	Lys Leu Pro Asn Asn Glu Asp Arg Val Arg Gly Ser Phe Ala Phe Asp
2123	1825 1830 1835 1840
2124	
2125	Ser Pro His His Tyr Thr Pro Ile Glu Gly Thr Pro Tyr Cys Phe Ser
2126	1845 1850 1855
2127	
2128	Arg Asn Asp Ser Leu Ser Ser Leu Asp Phe Asp Asp Asp Asp Val Asp
2129	1860 1865 1870
2130	
2131	Leu Ser Arg Glu Lys Ala Glu Leu Arg Lys Ala Lys Glu Asn Lys Glu
2132	1875 1880 1885
2133	
2134	Ser Glu Ala Lys Val Thr Ser His Thr Glu Leu Thr Ser Asn Gln Gln
2135	1890 1895 1900
2136	
2137	Ser Ala Asn Lys Thr Gln Ala Ile Ala Lys Gln Pro Ile Asn Arg Gly
2138	1905 1910 1915 1920
2139	
2140	
2141	Gln Pro Lys Pro Ile Leu Gln Lys Gln Ser Thr Phe Pro Gln Ser Ser
2142	1925 1930 1935
2143	
2144	Lys Asp Ile Pro Asp Arg Gly Ala Ala Thr Asp Glu Lys Leu Gln Asn
2145	1940 1945 1950
2146	
2147	Phe Ala Ile Glu Asn Thr Pro Val Cys Phe Ser His Asn Ser Ser Leu
2148	1955 1960 1965
2149	
2150	Ser Ser Leu Ser Asp Ile Asp Gln Glu Asn Asn Asn Lys Glu Asn Glu
2151	1970 1975 1980
2152	
2153	Pro Ile Lys Glu Thr Glu Pro Pro Asp Ser Gln Gly Glu Pro Ser Lys
2154	1985 1990 1995 2000
2155	
2156	Pro Gln Ala Ser Gly Tyr Ala Pro Lys Ser Phe His Val Glu Asp Thr
2157	2005 2010 2015
2158	
2159	Pro Val Cys Phe Ser Arg Asn Ser Ser Leu Ser Ser Leu Ser Ile Asp

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	2020	2025	2030
2160			
2161			
2162	Ser Glu Asp Asp Leu Leu Gln Glu Cys Ile Ser Ser Ala Met Pro Lys		
2163	2035	2040	2045
2164			
2165	Lys Lys Lys Pro Ser Arg Leu Lys Gly Asp Asn Glu Lys His Ser Pro		
2166	2050	2055	2060
2167			
2168	Arg Asn Met Gly Gly Ile Leu Gly Glu Asp Leu Thr Leu Asp Leu Lys		
2169	2065	2070	2075 2080
2170			
2171	Asp Ile Gln Arg Pro Asp Ser Glu His Gly Leu Ser Pro Asp Ser Glu		
2172	2085	2090	2095
2173			
2174	Asn Phe Asp Trp Lys Ala Ile Gln Glu Gly Ala Asn Ser Ile Val Ser		
2175	2100	2105	2110
2176			
2177	Ser Leu His Gln Ala Ala Ala Ala Cys Leu Ser Arg Gln Ala Ser		
2178	2115	2120	2125
2179			
2180	Ser Asp Ser Asp Ser Ile Leu Ser Leu Lys Ser Gly Ile Ser Leu Gly		
2181	2130	2135	2140
2182			
2183	Ser Pro Phe His Leu Thr Pro Asp Gln Glu Glu Lys Pro Phe Thr Ser		
2184	2145	2150	2155 2160
2185			
2186	Asn Lys Gly Pro Arg Ile Leu Lys Pro Gly Glu Lys Ser Thr Leu Glu		
2187	2165	2170	2175
2188			
2189	Thr Lys Lys Ile Glu Ser Glu Ser Lys Gly Ile Lys Gly Gly Lys Lys		
2190	2180	2185	2190
2191			
2192	Val Tyr Lys Ser Leu Ile Thr Gly Lys Val Arg Ser Asn Ser Glu Ile		
2193	2195	2200	2205
2194			
2195	Ser Gly Gln Met Lys Gln Pro Leu Gln Ala Asn Met Pro Ser Ile Ser		
2196	2210	2215	2220
2197			
2198	Arg Gly Arg Thr Met Ile His Ile Pro Gly Val Arg Asn Ser Ser Ser		
2199	2225	2230	2235 2240
2200			
2201	Ser Thr Ser Pro Val Ser Lys Lys Gly Pro Pro Leu Lys Thr Pro Ala		
2202	2245	2250	2255
2203			
2204	Ser Lys Ser Pro Ser Glu Gly Gln Thr Ala Thr Thr Ser Pro Arg Gly		
2205	2260	2265	2270
2206			
2207			
2208	Ala Lys Pro Ser Val Lys Ser Glu Leu Ser Pro Val Ala Arg Gln Thr		
2209	2275	2280	2285
2210			
2211	Ser Gln Ile Gly Gly Ser Ser Lys Ala Pro Ser Arg Ser Gly Ser Arg		
2212	2290	2295	2300

RAW SEQUENCE LISTING PATENT APPLICATION US/09/442,489D

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INPUT SET: S37023.raw

```

2213
2214 Asp Ser Thr Pro Ser Arg Pro Ala Gln Gln Pro Leu Ser Arg Pro Ile
2215 2305                2310                2315                2320
2216
2217 Gln Ser Pro Gly Arg Asn Ser Ile Ser Pro Gly Arg Asn Gly Ile Ser
2218                2325                2330                2335
2219
2220 Pro Pro Asn Lys Leu Ser Gln Leu Pro Arg Thr Ser Ser Pro Ser Thr
2221                2340                2345                2350
2222
2223 Ala Ser Thr Lys Ser Ser Gly Ser Gly Lys Met Ser Tyr Thr Ser Pro
2224                2355                2360                2365
2225
2226 Gly Arg Gln Met Ser Gln Gln Asn Leu Thr Lys Gln Thr Gly Leu Ser
2227                2370                2375                2380
2228
2229 Lys Asn Ala Ser Ser Ile Pro Arg Ser Glu Ser Ala Ser Lys Gly Leu
2230 2385                2390                2395                2400
2231
2232 Asn Gln Met Asn Asn Gly Asn Gly Ala Asn Lys Lys Val Glu Leu Ser
2233                2405                2410                2415
2234
2235 Arg Met Ser Ser Thr Lys Ser Ser Gly Ser Glu Ser Asp Arg Ser Glu
2236                2420                2425                2430
2237
2238 Arg Pro Val Leu Val Arg Gln Ser Thr Phe Ile Lys Glu Ala Pro Ser
2239                2435                2440                2445
2240
2241 Pro Thr Leu Arg Arg Lys Leu Glu Glu Ser Ala Ser Phe Glu Ser Leu
2242                2450                2455                2460
2243
2244 Ser Pro Ser Ser Arg Pro Ala Ser Pro Thr Arg Ser Gln Ala Gln Thr
2245 2465                2470                2475                2480
2246
2247 Pro Val Leu Ser Pro Ser Leu Pro Asp Met Ser Leu Ser Thr His Ser
2248                2485                2490                2495
2249
2250 Ser Val Gln Ala Gly Gly Trp Arg Lys Leu Pro Pro Asn Leu Ser Pro
2251                2500                2505                2510
2252
2253 Thr Ile Glu Tyr Asn Asp Gly Arg Pro Ala Lys Arg His Asp Ile Ala
2254                2515                2520                2525
2255
2256 Arg Ser His Ser Glu Ser Pro Ser Arg Leu Pro Ile Asn Arg Ser Gly
2257 2530                2535                2540
2258
2259 Thr Trp Lys Arg Glu His Ser Lys His Ser Ser Ser Leu Pro Arg Val
2260 2545                2550                2555                2560
2261
2262 Ser Thr Trp Arg Arg Thr Gly Ser Ser Ser Ser Ile Leu Ser Ala Ser
2263                2565                2570                2575
2264
2265 Ser Glu Ser Ser Glu Lys Ala Lys Ser Glu Asp Glu Lys His Val Asn

```

RAW SEQUENCE LISTING PATENT APPLICATION US/09/442,489D

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2266	2580	2585	2590
2267			
2268	Ser Ile Ser Gly Thr Lys Gln Ser Lys Glu Asn Gln Val Ser Ala Lys		
2269	2595	2600	2605
2270			
2271	Gly Thr Trp Arg Lys Ile Lys Glu Asn Glu Phe Ser Pro Thr Asn Ser		
2272	2610	2615	2620
2273			
2274			
2275	Thr Ser Gln Thr Val Ser Ser Gly Ala Thr Asn Gly Ala Glu Ser Lys		
2276	2625	2630	2635 2640
2277			
2278	Thr Leu Ile Tyr Gln Met Ala Pro Ala Val Ser Lys Thr Glu Asp Val		
2279	2645	2650	2655
2280			
2281	Trp Val Arg Ile Glu Asp Cys Pro Ile Asn Asn Pro Arg Ser Gly Arg		
2282	2660	2665	2670
2283			
2284	Ser Pro Thr Gly Asn Thr Pro Pro Val Ile Asp Ser Val Ser Glu Lys		
2285	2675	2680	2685
2286			
2287	Ala Asn Pro Asn Ile Lys Asp Ser Lys Asp Asn Gln Ala Lys Gln Asn		
2288	2690	2695	2700
2289			
2290	Val Gly Asn Gly Ser Val Pro Met Arg Thr Val Gly Leu Glu Asn Arg		
2291	2705	2710	2715 2720
2292			
2293	Leu Asn Ser Phe Ile Gln Val Asp Ala Pro Asp Gln Lys Gly Thr Glu		
2294	2725	2730	2735
2295			
2296	Ile Lys Pro Gly Gln Asn Asn Pro Val Pro Val Ser Glu Thr Asn Glu		
2297	2740	2745	2750
2298			
2299	Ser Ser Ile Val Glu Arg Thr Pro Phe Ser Ser Ser Ser Ser Ser Lys		
2300	2755	2760	2765
2301			
2302	His Ser Ser Pro Ser Gly Thr Val Ala Ala Arg Val Thr Pro Phe Asn		
2303	2770	2775	2780
2304			
2305	Tyr Asn Pro Ser Pro Arg Lys Ser Ser Ala Asp Ser Thr Ser Ala Arg		
2306	2785	2790	2795 2800
2307			
2308	Pro Ser Gln Ile Pro Thr Pro Val Asn Asn Asn Thr Lys Lys Arg Asp		
2309	2805	2810	2815
2310			
2311	Ser Lys Thr Asp Ser Thr Glu Ser Ser Gly Thr Gln Ser Pro Lys Arg		
2312	2820	2825	2830
2313			
2314	His Ser Gly Ser Tyr Leu Val Thr Ser Val		
2315	2835	2840	
2316			
2317			

total 2842 not 2843

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/442,489DDATE: 09/30/2003
TIME: 16:00:38

INPUT SET: S37023.raw

3914
3915 (i) SEQUENCE CHARACTERISTICS:
--> 3916 (A) LENGTH: 24 base pairs 25
3917 (B) TYPE: nucleic acid
3918 (C) STRANDEDNESS: single
3919 (D) TOPOLOGY: linear
3920
3921 (ii) MOLECULE TYPE: cDNA
3922
3923 (vi) ORIGINAL SOURCE:
3924 (A) ORGANISM: Homo sapiens
3925
3926 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:95:
3927
--> 3928 AGAAGGATCCCTTGTGCAGTGTGGA 24 25 → All non-coding nucleotides
3929 need to be grouped in 10's (tens)
with a space between each group.

3930 (2) INFORMATION FOR SEQ ID NO:96:
3931
3932 (i) SEQUENCE CHARACTERISTICS:
3933 (A) LENGTH: 24 base pairs
3934 (B) TYPE: nucleic acid
3935 (C) STRANDEDNESS: single
3936 (D) TOPOLOGY: linear
3937
3938 (ii) MOLECULE TYPE: cDNA
3939
3940 (vi) ORIGINAL SOURCE:
--> 3941 (A) Homo sapiens (A) Organism: Homo sapiens. Mandatory
3942 heading missing throughout
3943 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:96: sequences.
3944
3945 GACAGGATCCTGAAGCTGAGTTTG24 → Same error throughout
3946

3947 (2) INFORMATION FOR SEQ ID NO:97:
3948
3949 (i) SEQUENCE CHARACTERISTICS:
3950 (A) LENGTH: 18 base pairs
3951 (B) TYPE: nucleic acid
3952 (C) STRANDEDNESS: single
3953 (D) TOPOLOGY: linear
3954
3955 (ii) MOLECULE TYPE: cDNA
3956
3957 (vi) ORIGINAL SOURCE:
--> 3958 (A) Homo sapiens
3959
3960 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:97:
3961
3962 TCAGAAAGTGCTGAAGAG18
3963

3964 (2) INFORMATION FOR SEQ ID NO:98:

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/442,489DDATE: 09/30/2003
TIME: 16:00:38

INPUT SET: S37023.raw

3965
3966 (i) SEQUENCE CHARACTERISTICS:
3967 (A) LENGTH: 19 base pairs
3968 (B) TYPE: nucleic acid
3969 (C) STRANDEDNESS: single
3970 (D) TOPOLOGY: linear
3971
3972 (ii) MOLECULE TYPE: cDNA
3973
3974 (vi) ORIGINAL SOURCE:
--> 3975 (A) Homo sapiens
3976
3977 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:98:
3978
3979 GGAATAATTAGGTCTCAA19 *same*
3980

3981 (2) INFORMATION FOR SEQ ID NO:99:
3982
3983 (i) SEQUENCE CHARACTERISTICS:
3984 (A) LENGTH: 21 base pairs
3985 (B) TYPE: nucleic acid
3986 (C) STRANDEDNESS: single
3987 (D) TOPOLOGY: linear
3988
3989 (ii) MOLECULE TYPE: cDNA
3990
3991 (vi) ORIGINAL SOURCE:
--> 3992 (A) Homo sapiens
3993
3994 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:99:
3995
3996 GCAAATCCTAAGAGAGACAA21 *same*
3997

3998 (2) INFORMATION FOR SEQ ID NO:100:
3999
4000 (i) SEQUENCE CHARACTERISTICS:
4001 (A) LENGTH: 19 base pairs
4002 (B) TYPE: nucleic acid
4003 (C) STRANDEDNESS: single
4004 (D) TOPOLOGY: linear
4005
4006 (ii) MOLECULE TYPE: cDNA
4007
4008 (vi) ORIGINAL SOURCE:
--> 4009 (A) Homo sapiens
4010
4011 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:100:
4012
4013 GATGGCAAGCTTGAGCCAG19 *same*
4014

4015 (2) INFORMATION FOR SEQ ID NO:101:

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/442,489DDATE: 09/30/2003
TIME: 16:00:38

INPUT SET: S37023.raw

4016
4017 (i) SEQUENCE CHARACTERISTICS:
4018 (A) LENGTH: 18 base pairs
4019 (B) TYPE: nucleic acid
4020 (C) STRANDEDNESS: single
4021 (D) TOPOLOGY: linear
4022
4023 (ii) MOLECULE TYPE: cDNA
4024
4025 (vi) ORIGINAL SOURCE:
--> 4026 (A) Homo sapiens
4027
4028 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:101:
4029
4030 GTTCCAGCAGTGTACAG18 *same*
4031

4032 (2) INFORMATION FOR SEQ ID NO:102:
4033
4034 (i) SEQUENCE CHARACTERISTICS:
4035 (A) LENGTH: 18 base pairs
4036 (B) TYPE: nucleic acid
4037 (C) STRANDEDNESS: single
4038 (D) TOPOLOGY: linear
4039
4040 (ii) MOLECULE TYPE: cDNA
4041
4042 (vi) ORIGINAL SOURCE:
--> 4043 (A) Homo sapiens
4044
4045 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:102:
4046
--> 4047 GGGAGATTTGCTCTGA102 *18 group in 10's*
4048
4049

4050 (2) INFORMATION FOR SEQ ID NO:103:
4051
4052 (i) SEQUENCE CHARACTERISTICS:
4053 (A) LENGTH: 23 base pairs
4054 (B) TYPE: nucleic acid
4055 (C) STRANDEDNESS: single
4056 (D) TOPOLOGY: linear
4057
4058 (ii) MOLECULE TYPE: cDNA
4059
4060 (vi) ORIGINAL SOURCE:
--> 4061 (A) Homo sapiens
4062
4063 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:103:
4064
4065 AGTACAAGGA TGCCAATATT ATG
4066

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/442,489DDATE: 09/30/2003
TIME: 16:00:38

INPUT SET: S37023.raw

4067 (2) INFORMATION FOR SEQ ID NO:104:
4068
4069 (i) SEQUENCE CHARACTERISTICS:
4070 (A) LENGTH: 23 base pairs
4071 (B) TYPE: nucleic acid
4072 (C) STRANDEDNESS: single
4073 (D) TOPOLOGY: linear
4074
4075 (ii) MOLECULE TYPE: cDNA
4076
4077 (vi) ORIGINAL SOURCE:
--> 4078 (A) Homo sapiens
4079
4080 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:104:
4081
4082 ACTTCTATCT TTTTCAGAAC GAG 23
4083

4084 (2) INFORMATION FOR SEQ ID NO:105:
4085
4086 (i) SEQUENCE CHARACTERISTICS:
4087 (A) LENGTH: 23 base pairs
4088 (B) TYPE: nucleic acid
4089 (C) STRANDEDNESS: single
4090 (D) TOPOLOGY: linear
4091
4092 (ii) MOLECULE TYPE: cDNA
4093
4094 (vi) ORIGINAL SOURCE:
--> 4095 (A) Homo sapiens
4096
4097 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:105:
4098
4099 ATTTGAATAC TACAGTGTTA CCC 23
4100

4101 (2) INFORMATION FOR SEQ ID NO:106:
4102
4103 (i) SEQUENCE CHARACTERISTICS:
4104 (A) LENGTH: 24 base pairs
4105 (B) TYPE: nucleic acid
4106 (C) STRANDEDNESS: single
4107 (D) TOPOLOGY: linear
4108
4109 (ii) MOLECULE TYPE: cDNA
4110
4111 (vi) ORIGINAL SOURCE:
--> 4112 (A) Homo sapiens
4113
4114 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:106:
4115
4116 CTTGTATTCT AATTTGGCAT AAGG 24

INPUT SET: S37023.raw

4117

4118 (2) INFORMATION FOR SEQ ID NO:107:
4119
4120 (i) SEQUENCE CHARACTERISTICS:
4121 (A) LENGTH: 22 base pairs
4122 (B) TYPE: nucleic acid
4123 (C) STRANDEDNESS: single
4124 (D) TOPOLOGY: linear
4125
4126 (ii) MOLECULE TYPE: cDNA
4127
4128 (vi) ORIGINAL SOURCE:
--> 4129 (A) Homo sapiens
4130
4131 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:107:
4132
4133 CTGCCCATAC ACATTCAAAC AC 22
4134

4135 (2) INFORMATION FOR SEQ ID NO:108:
4136
4137 (i) SEQUENCE CHARACTERISTICS:
4138 (A) LENGTH: 21 base pairs
4139 (B) TYPE: nucleic acid
4140 (C) STRANDEDNESS: single
4141 (D) TOPOLOGY: linear
4142
4143 (ii) MOLECULE TYPE: cDNA
4144
4145 (vi) ORIGINAL SOURCE:
--> 4146 (A) Homo sapiens
4147
4148 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:108:
4149
4150 TGTTTGCGTC TTGCCCATCT T 21
4151

4152 (2) INFORMATION FOR SEQ ID NO:109:
4153
4154 (i) SEQUENCE CHARACTERISTICS:
4155 (A) LENGTH: 24 base pairs
4156 (B) TYPE: nucleic acid
4157 (C) STRANDEDNESS: single
4158 (D) TOPOLOGY: linear
4159
4160 (ii) MOLECULE TYPE: cDNA
4161
4162 (vi) ORIGINAL SOURCE:
--> 4163 (A) Homo sapiens
4164
4165 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:109:
4166

RAW SEQUENCE LISTING
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INPUT SET: S37023.raw

4167 AGTCTTAAAT ATTCAGATGA GCAG
4168

24

4169 (2) INFORMATION FOR SEQ ID NO:110:

4170

4171 (i) SEQUENCE CHARACTERISTICS:

4172 (A) LENGTH: 26 base pairs

4173 (B) TYPE: nucleic acid

4174 (C) STRANDEDNESS: single

4175 (D) TOPOLOGY: linear

4176

4177 (ii) MOLECULE TYPE: cDNA

4178

4179 (vi) ORIGINAL SOURCE:

--> 4180 (A) Homo sapiens

4181

4182 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:110:

4183

4184 GTTTCTCTTC ATTATATTTT ATGCTA

4185

26

4186 (2) INFORMATION FOR SEQ ID NO:111:

4187

4188 (i) SEQUENCE CHARACTERISTICS:

4189 (A) LENGTH: 23 base pairs

4190 (B) TYPE: nucleic acid

4191 (C) STRANDEDNESS: single

4192 (D) TOPOLOGY: linear

4193

4194 (ii) MOLECULE TYPE: cDNA

4195

4196 (vi) ORIGINAL SOURCE:

--> 4197 (A) Homo sapiens

4198

4199 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:111:

4200

4201 AAGCCTACCA ATTATAGTGA ACG

4202

23

4203 (2) INFORMATION FOR SEQ ID NO:112:

4204

4205 (i) SEQUENCE CHARACTERISTICS:

4206 (A) LENGTH: 23 base pairs

4207 (B) TYPE: nucleic acid

4208 (C) STRANDEDNESS: single

4209 (D) TOPOLOGY: linear

4210

4211 (ii) MOLECULE TYPE: cDNA

4212

4213 (vi) ORIGINAL SOURCE:

--> 4214 (A) Homo sapiens

4215

4216 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:112:

INPUT SET: S37023.raw

4217
4218 AGCTGATGAC AAAGATGATA ATC 23
4219

4220 (2) INFORMATION FOR SEQ ID NO:113:
4221
4222 (i) SEQUENCE CHARACTERISTICS:
4223 (A) LENGTH: 24 base pairs
4224 (B) TYPE: nucleic acid
4225 (C) STRANDEDNESS: single
4226 (D) TOPOLOGY: linear
4227
4228 (ii) MOLECULE TYPE: cDNA
4229
4230 (vi) ORIGINAL SOURCE:
--> 4231 (A) Homo sapiens
4232
4233 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:113:
4234
4235 AAGAAACAAT ACAGACTTAT TGTG 24
4236

4237 (2) INFORMATION FOR SEQ ID NO:114:
4238
4239 (i) SEQUENCE CHARACTERISTICS:
4240 (A) LENGTH: 20 base pairs
4241 (B) TYPE: nucleic acid
4242 (C) STRANDEDNESS: single
4243 (D) TOPOLOGY: linear
4244
4245 (ii) MOLECULE TYPE: cDNA
4246
4247 (vi) ORIGINAL SOURCE:
--> 4248 (A) Homo sapiens
4249
4250 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:114:
4251
4252 ATGAGTGGGG TCTCCTGAAC 20
4253

4254 (2) INFORMATION FOR SEQ ID NO:115:
4255
4256 (i) SEQUENCE CHARACTERISTICS:
4257 (A) LENGTH: 21 base pairs
4258 (B) TYPE: nucleic acid
4259 (C) STRANDEDNESS: single
4260 (D) TOPOLOGY: linear
4261
4262 (ii) MOLECULE TYPE: cDNA
4263
4264 (vi) ORIGINAL SOURCE:
--> 4265 (A) Homo sapiens
4266

RAW SEQUENCE LISTING
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INPUT SET: S37023.raw

4267 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:115:
4268
4269 ATCTCCCTCC AAAAGTGGTG C 21
4270

4271 (2) INFORMATION FOR SEQ ID NO:116:
4272
4273 (i) SEQUENCE CHARACTERISTICS:
4274 (A) LENGTH: 22 base pairs
4275 (B) TYPE: nucleic acid
4276 (C) STRANDEDNESS: single
4277 (D) TOPOLOGY: linear
4278
4279 (ii) MOLECULE TYPE: cDNA
4280
4281 (vi) ORIGINAL SOURCE:
--> 4282 (A) Homo sapiens
4283
4284 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:116:
4285
4286 TCCATCTGGA GTACTTTCTG TG 22
4287

4288 (2) INFORMATION FOR SEQ ID NO:117:
4289
4290 (i) SEQUENCE CHARACTERISTICS:
4291 (A) LENGTH: 22 base pairs
4292 (B) TYPE: nucleic acid
4293 (C) STRANDEDNESS: single
4294 (D) TOPOLOGY: linear
4295
4296 (ii) MOLECULE TYPE: cDNA
4297
4298 (vi) ORIGINAL SOURCE:
--> 4299 (A) Homo sapiens
4300
4301 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:117:
4302
4303 AGTAAATGCT GCACTTCAGA GG 22
4304

4305 (2) INFORMATION FOR SEQ ID NO:118:
4306
4307 (i) SEQUENCE CHARACTERISTICS:
4308 (A) LENGTH: 19 base pairs
4309 (B) TYPE: nucleic acid
4310 (C) STRANDEDNESS: single
4311 (D) TOPOLOGY: linear
4312
4313 (ii) MOLECULE TYPE: cDNA
4314
4315 (vi) ORIGINAL SOURCE:
--> 4316 (A) Homo sapiens

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4317
4318 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:118:
4319
4320 CCGTGGCATA TCATCCCCC
4321

19

4322 (2) INFORMATION FOR SEQ ID NO:119:
4323
4324 (i) SEQUENCE CHARACTERISTICS:
4325 (A) LENGTH: 22 base pairs
4326 (B) TYPE: nucleic acid
4327 (C) STRANDEDNESS: single
4328 (D) TOPOLOGY: linear
4329
4330 (ii) MOLECULE TYPE: cDNA
4331
4332 (vi) ORIGINAL SOURCE:
--> 4333 (A) Homo sapiens
4334
4335 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:119:
4336 CCCAGACTGC TTCAAAATTA CC
4337

22

4338 (2) INFORMATION FOR SEQ ID NO:120:
4339
4340 (i) SEQUENCE CHARACTERISTICS:
4341 (A) LENGTH: 21 base pairs
4342 (B) TYPE: nucleic acid
4343 (C) STRANDEDNESS: single
4344 (D) TOPOLOGY: linear
4345
4346 (ii) MOLECULE TYPE: cDNA
4347
4348 (vi) ORIGINAL SOURCE:
--> 4349 (A) Homo sapiens
4350
4351 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:120:
4352
4353 GAGCCTCATC TGTACTTCTG C
4354

21

4355 (2) INFORMATION FOR SEQ ID NO:121:
4356
4357 (i) SEQUENCE CHARACTERISTICS:
4358 (A) LENGTH: 21 base pairs
4359 (B) TYPE: nucleic acid
4360 (C) STRANDEDNESS: single
4361 (D) TOPOLOGY: linear
4362
4363 (ii) MOLECULE TYPE: cDNA
4364
4365 (vi) ORIGINAL SOURCE:
--> 4366 (A) Homo sapiens

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INPUT SET: S37023.raw

4367
4368 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:121:
4369
4370 CCCTCCAAAT GAGTTAGCTG C
4371

21

4372 (2) INFORMATION FOR SEQ ID NO:122:
4373
4374 (i) SEQUENCE CHARACTERISTICS:
4375 (A) LENGTH: 23 base pairs
4376 (B) TYPE: nucleic acid
4377 (C) STRANDEDNESS: single
4378 (D) TOPOLOGY: linear
4379
4380 (ii) MOLECULE TYPE: cDNA
4381
4382 (vi) ORIGINAL SOURCE:
--> 4383 (A) Homo sapiens
4384
4385 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:122:
4386
4387 TTGTGGTATA GGTTTTACTG GTG
4388

23

4389 (2) INFORMATION FOR SEQ ID NO:123:
4390
4391 (i) SEQUENCE CHARACTERISTICS:
4392 (A) LENGTH: 23 base pairs
4393 (B) TYPE: nucleic acid
4394 (C) STRANDEDNESS: single
4395 (D) TOPOLOGY: linear
4396
4397 (ii) MOLECULE TYPE: cDNA
4398
4399 (vi) ORIGINAL SOURCE:
--> 4400 (A) Homo sapiens
4401
4402 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:123:
4403
4404 ACCCAACAAA AATCAGTTAG ATG
4405

23

4406 (2) INFORMATION FOR SEQ ID NO:124:
4407
4408 (i) SEQUENCE CHARACTERISTICS:
4409 (A) LENGTH: 21 base pairs
4410 (B) TYPE: nucleic acid
4411 (C) STRANDEDNESS: single
4412 (D) TOPOLOGY: linear
4413
4414 (ii) MOLECULE TYPE: cDNA
4415
4416 (vi) ORIGINAL SOURCE:

INPUT SET: S37023.raw

--> 4417 (A) Homo sapiens
4418
4419 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:124:
4420
4421 GTGGCTGGTA ACTTTAGCCT C
4422 21

4423 (2) INFORMATION FOR SEQ ID NO:125:
4424
4425 (i) SEQUENCE CHARACTERISTICS:
4426 (A) LENGTH: 21 base pairs
4427 (B) TYPE: nucleic acid
4428 (C) STRANDEDNESS: single
4429 (D) TOPOLOGY: linear
4430
4431 (ii) MOLECULE TYPE: cDNA
4432
4433 (vi) ORIGINAL SOURCE:
--> 4434 (A) Homo sapiens
4435
4436 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:125:
4437
4438 ATGATGTTGA CCTTTCCAGG G
4439 21

4440 (2) INFORMATION FOR SEQ ID NO:126:
4441
4442 (i) SEQUENCE CHARACTERISTICS:
4443 (A) LENGTH: 24 base pairs
4444 (B) TYPE: nucleic acid
4445 (C) STRANDEDNESS: single
4446 (D) TOPOLOGY: linear
4447
4448 (ii) MOLECULE TYPE: cDNA
4449
4450 (vi) ORIGINAL SOURCE:
--> 4451 (A) Homo sapiens
4452
4453 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:126:
4454
4455 ATTGTGTAAC TTTTCATCAG TTGC
4456 24

4457 (2) INFORMATION FOR SEQ ID NO:127:
4458
4459 (i) SEQUENCE CHARACTERISTICS:
4460 (A) LENGTH: 21 base pairs
4461 (B) TYPE: nucleic acid
4462 (C) STRANDEDNESS: single
4463 (D) TOPOLOGY: linear
4464
4465 (ii) MOLECULE TYPE: cDNA
4466

INPUT SET: S37023.raw

4467 (vi) ORIGINAL SOURCE:
--> 4468 (A) Homo sapiens
4469
4470 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:127:
4471
4472 AAAGACATAC CAGACAGAGG G
4473 21

4474 (2) INFORMATION FOR SEQ ID NO:128:
4475
4476 (i) SEQUENCE CHARACTERISTICS:
4477 (A) LENGTH: 21 base pairs
4478 (B) TYPE: nucleic acid
4479 (C) STRANDEDNESS: single
4480 (D) TOPOLOGY: linear
4481
4482 (ii) MOLECULE TYPE: cDNA
4483
4484 (vi) ORIGINAL SOURCE:
--> 4485 (A) Homo sapiens
4486
4487 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:128:
4488
4489 CTTTTTTGGC ATTGCGGAGC T
4490 21

4491 (2) INFORMATION FOR SEQ ID NO:129:
4492
4493 (i) SEQUENCE CHARACTERISTICS:
4494 (A) LENGTH: 22 base pairs
4495 (B) TYPE: nucleic acid
4496 (C) STRANDEDNESS: single
4497 (D) TOPOLOGY: linear
4498
4499 (ii) MOLECULE TYPE: cDNA
4500
4501 (vi) ORIGINAL SOURCE:
--> 4502 (A) Homo sapiens
4503
4504 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:129:
4505
4506 AAGATGACCT GTTGCAGGAA TG
4507 22

4508 (2) INFORMATION FOR SEQ ID NO:130:
4509
4510 (i) SEQUENCE CHARACTERISTICS:
4511 (A) LENGTH: 24 base pairs
4512 (B) TYPE: nucleic acid
4513 (C) STRANDEDNESS: single
4514 (D) TOPOLOGY: linear
4515
4516 (ii) MOLECULE TYPE: cDNA

INPUT SET: S37023.raw

4517
4518 (vi) ORIGINAL SOURCE:
--> 4519 (A) Homo sapiens
4520
4521 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:130:
4522
4523 GAATCAGACC AAGCTTGTCT AGAT 24
4524

4525 (2) INFORMATION FOR SEQ ID NO:131:
4526
4527 (i) SEQUENCE CHARACTERISTICS:
4528 (A) LENGTH: 24 base pairs
4529 (B) TYPE: nucleic acid
4530 (C) STRANDEDNESS: single
4531 (D) TOPOLOGY: linear
4532
4533 (ii) MOLECULE TYPE: cDNA
4534
4535 (vi) ORIGINAL SOURCE:
--> 4536 (A) Homo sapiens
4537
4538 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:131:
4539
4540 CAATAGTAAG TAGTTTACAT CAAG 24
4541

4542 (2) INFORMATION FOR SEQ ID NO:132:
4543
4544 (i) SEQUENCE CHARACTERISTICS:
4545 (A) LENGTH: 22 base pairs
4546 (B) TYPE: nucleic acid
4547 (C) STRANDEDNESS: single
4548 (D) TOPOLOGY: linear
4549
4550 (ii) MOLECULE TYPE: cDNA
4551
4552 (vi) ORIGINAL SOURCE:
--> 4553 (A) Homo sapiens
4554
4555 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:132:
4556
4557 AAACAGGACT TGTACTGTAG GA 22
4558

4559 (2) INFORMATION FOR SEQ ID NO:133:
4560
4561 (i) SEQUENCE CHARACTERISTICS:
4562 (A) LENGTH: 21 base pairs
4563 (B) TYPE: nucleic acid
4564 (C) STRANDEDNESS: single
4565 (D) TOPOLOGY: linear
4566

RAW SEQUENCE LISTING
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INPUT SET: S37023.raw

4567 (ii) MOLECULE TYPE: cDNA
4568
4569 (vi) ORIGINAL SOURCE:
--> 4570 (A) Homo sapiens
4571
4572 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:133:
4573
4574 CAGCCCCTTC AAGCAAACAT C
4575 21

4576 (2) INFORMATION FOR SEQ ID NO:134:
4577
4578 (i) SEQUENCE CHARACTERISTICS:
4579 (A) LENGTH: 22 base pairs
4580 (B) TYPE: nucleic acid
4581 (C) STRANDEDNESS: single
4582 (D) TOPOLOGY: linear
4583
4584 (ii) MOLECULE TYPE: cDNA
4585
4586 (vi) ORIGINAL SOURCE:
--> 4587 (A) Homo sapiens
4588
4589 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:134:
4590
4591 GAGGACTTAT TCCATTCTA CC
4592 22

4593 (2) INFORMATION FOR SEQ ID NO:135:
4594
4595 (i) SEQUENCE CHARACTERISTICS:
4596 (A) LENGTH: 20 base pairs
4597 (B) TYPE: nucleic acid
4598 (C) STRANDEDNESS: single
4599 (D) TOPOLOGY: linear
4600
4601 (ii) MOLECULE TYPE: cDNA
4602
4603 (vi) ORIGINAL SOURCE:
--> 4604 (A) Homo sapiens
4605
4606 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:135:
4607
4608 CAGTCTCCTG GCCGAAACTC
4609 20

4610 (2) INFORMATION FOR SEQ ID NO:136:
4611
4612 (i) SEQUENCE CHARACTERISTICS:
4613 (A) LENGTH: 22 base pairs
4614 (B) TYPE: nucleic acid
4615 (C) STRANDEDNESS: single
4616 (D) TOPOLOGY: linear

RAW SEQUENCE LISTING
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INPUT SET: S37023.raw

4617
4618 (ii) MOLECULE TYPE: cDNA
4619
4620 (vi) ORIGINAL SOURCE:
--> 4621 (A) Homo sapiens
4622
4623 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:136:
4624
4625 GTTGACTGGC GTACTAATAC AG 22
4626

4627 (2) INFORMATION FOR SEQ ID NO:137:
4628
4629 (i) SEQUENCE CHARACTERISTICS:
4630 (A) LENGTH: 23 base pairs
4631 (B) TYPE: nucleic acid
4632 (C) STRANDEDNESS: single
4633 (D) TOPOLOGY: linear
4634
4635 (ii) MOLECULE TYPE: cDNA
4636
4637 (vi) ORIGINAL SOURCE:
--> 4638 (A) Homo sapiens
4639
4640 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:137:
4641
4642 TGGTAATGGA GCCAATAAAA AGG 23
4643

4644 (2) INFORMATION FOR SEQ ID NO:138:
4645
4646 (i) SEQUENCE CHARACTERISTICS:
4647 (A) LENGTH: 20 base pairs
4648 (B) TYPE: nucleic acid
4649 (C) STRANDEDNESS: single
4650 (D) TOPOLOGY: linear
4651
4652 (ii) MOLECULE TYPE: cDNA
4653
4654 (vi) ORIGINAL SOURCE:
--> 4655 (A) Homo sapiens
4656
4657 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:138:
4658
4659 TGGGACTTTT CGCCATCCAC 20
4660

4661 (2) INFORMATION FOR SEQ ID NO:139:
4662
4663 (i) SEQUENCE CHARACTERISTICS:
4664 (A) LENGTH: 22 base pairs
4665 (B) TYPE: nucleic acid
4666 (C) STRANDEDNESS: single

INPUT SET: S37023.raw

4667 (D) TOPOLOGY: linear
4668
4669 (ii) MOLECULE TYPE: cDNA
4670
4671 (vi) ORIGINAL SOURCE:
--> 4672 (A) Homo sapiens
4673
4674 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:139:
4675
4676 TGTCTCTATC CACACATTCG TC
4677 22

4678 (2) INFORMATION FOR SEQ ID NO:140:
4679
4680 (i) SEQUENCE CHARACTERISTICS:
4681 (A) LENGTH: 24 base pairs
4682 (B) TYPE: nucleic acid
4683 (C) STRANDEDNESS: single
4684 (D) TOPOLOGY: linear
4685
4686 (ii) MOLECULE TYPE: cDNA
4687
4688 (vi) ORIGINAL SOURCE:
--> 4689 (A) Homo sapiens
4690
4691 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:140:
4692
4693 ATGTTTTTCA TCCTCACTTT TTGC
4694 24

4695 (2) INFORMATION FOR SEQ ID NO:141:
4696
4697 (i) SEQUENCE CHARACTERISTICS:
4698 (A) LENGTH: 22 base pairs
4699 (B) TYPE: nucleic acid
4700 (C) STRANDEDNESS: single
4701 (D) TOPOLOGY: linear
4702
4703 (ii) MOLECULE TYPE: cDNA
4704
4705 (vi) ORIGINAL SOURCE:
--> 4706 (A) Homo sapiens
4707
4708 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:141:
4709
4710 GGAGAAGAAC TGGAAGTTCA TC
4711 22

4712 (2) INFORMATION FOR SEQ ID NO:142:
4713
4714 (i) SEQUENCE CHARACTERISTICS:
4715 (A) LENGTH: 25 base pairs
4716 (B) TYPE: nucleic acid

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INPUT SET: S37023.raw

4717 (C) STRANDEDNESS: single
4718 (D) TOPOLOGY: linear
4719
4720 (ii) MOLECULE TYPE: cDNA
4721
4722 (vi) ORIGINAL SOURCE:
--> 4723 (A) Homo sapiens
4724
4725 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:142:
4726
4727 TTGAATCTTT AATGTTTGA TTTGC
4728 25

4729 (2) INFORMATION FOR SEQ ID NO:143:
4730
4731 (i) SEQUENCE CHARACTERISTICS:
4732 (A) LENGTH: 21 base pairs
4733 (B) TYPE: nucleic acid
4734 (C) STRANDEDNESS: single
4735 (D) TOPOLOGY: linear
4736
4737 (ii) MOLECULE TYPE: cDNA
4738
4739 (vi) ORIGINAL SOURCE:
--> 4740 (A) Homo sapiens
4741
4742 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:143:
4743
4744 TCTCCCACAG GTAATACTCC C
4745 21

4746 (2) INFORMATION FOR SEQ ID NO:144:
4747
4748 (i) SEQUENCE CHARACTERISTICS:
4749 (A) LENGTH: 21 base pairs
4750 (B) TYPE: nucleic acid
4751 (C) STRANDEDNESS: single
4752 (D) TOPOLOGY: linear
4753
4754 (ii) MOLECULE TYPE: cDNA
4755
4756 (vi) ORIGINAL SOURCE:
--> 4757 (A) Homo sapiens
4758
4759 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:144:
4760
4761 GCTACAACTG AATGGGGTAC G
4762 21

4763 (2) INFORMATION FOR SEQ ID NO:145:
4764
4765 (i) SEQUENCE CHARACTERISTICS:
4766 (A) LENGTH: 22 base pairs

INPUT SET: S37023.raw

4767 (B) TYPE: nucleic acid
4768 (C) STRANDEDNESS: single
4769 (D) TOPOLOGY: linear
4770
4771 (ii) MOLECULE TYPE: cDNA
4772
4773 (vi) ORIGINAL SOURCE:
--> 4774 (A) Homo sapiens
4775
4776 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:145:
4777
4778 CAGGACAAAA TAATCCTGTC CC 22
4779

4780 (2) INFORMATION FOR SEQ ID NO:146:
4781
4782 (i) SEQUENCE CHARACTERISTICS:
4783 (A) LENGTH: 24 base pairs
4784 (B) TYPE: nucleic acid
4785 (C) STRANDEDNESS: single
4786 (D) TOPOLOGY: linear
4787
4788 (ii) MOLECULE TYPE: cDNA
4789
4790 (vi) ORIGINAL SOURCE:
--> 4791 (A) Homo sapiens
4792
4793 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:146:
4794
4795
4796 ATTTTCTTAC TTTCATTCTT CCTC 24
4797

4798 (2) INFORMATION FOR SEQ ID NO:147:
4799
4800 (i) SEQUENCE CHARACTERISTICS:
4801 (A) LENGTH: 20 amino acids
4802 (B) TYPE: amino acid
4803 (D) Topology: mandatory heading missing throughout
4804 (ii) MOLECULE TYPE: protein amino acid sequences
4805
4806 (vi) ORIGINAL SOURCE:
--> 4807 (A) Artificial sequence (consensus)
4808
--> 4809 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:147:
4810
4811 Phe Xaa Val Glu Xaa Thr Pro Xaa Cys Phe Ser Arg Xaa Ser Ser Leu Ser Ser Leu
4812 1 5 10 15
4813
4814 Ser
4815 20
4816

4817 (2) INFORMATION FOR SEQ ID NO:148:

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TIME: 16:00:41

INPUT SET: S37023.raw

4818
4819 (i) SEQUENCE CHARACTERISTICS:
4820 (A) LENGTH: 20 amino acids
4821 (B) TYPE: amino acid
4822 (D) *same*
4823 (ii) MOLECULE TYPE: protein
4824
4825 (vi) ORIGINAL SOURCE:
--> 4826 (A) Homo sapiens
4827
--> 4828 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:148:
4829
4830 Tyr Cys Val Glu Asp Thr Pro Ile Cys Phe Ser Arg Cys Ser Ser Leu
4831 1 5 10 15
4832 Ser Ser Leu Ser
4833 20
4834

4835 (2) INFORMATION FOR SEQ ID NO:149:
4836
4837 (i) SEQUENCE CHARACTERISTICS:
4838 (A) LENGTH: 20 amino acids
4839 (B) TYPE: amino acid
4840 (D)
4841 (ii) MOLECULE TYPE: protein
4842
4843 (vi) ORIGINAL SOURCE:
--> 4844 (A) Homo sapiens
4845
--> 4846 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:149:
4847
4848 His Thr Val Gln Glu Thr Pro Leu Met Phe Ser Arg Cys Thr Ser Val
4849 1 5 10 15
4850 Ser Ser Leu Asp
4851 20
4852

4853 (2) INFORMATION FOR SEQ ID NO:150:
4854
4855 (i) SEQUENCE CHARACTERISTICS:
4856 (A) LENGTH: 20 amino acids
4857 (B) TYPE: amino acid
4858 (D)
4859 (ii) MOLECULE TYPE: protein
4860
4861 (vi) ORIGINAL SOURCE:
--> 4862 (A) Homo sapiens
4863
--> 4864 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:150:
4865
4866 Phe Ala Thr Glu Ser Thr Pro Asp Gly Phe Ser Cys Ser Ser Ser Leu
4867 1 5 10 15
4868 Ser Ala Leu Ser

INPUT SET: S37023.raw

4869 20
4870

4871 (2) INFORMATION FOR SEQ ID NO:151:
4872
4873 (i) SEQUENCE CHARACTERISTICS:
4874 (A) LENGTH: 20 amino acids
4875 (B) TYPE: amino acid
4876 (D)
4877 (ii) MOLECULE TYPE: protein
4878
4879 (vi) ORIGINAL SOURCE:
--> 4880 (A) Homo sapiens
4881
--> 4882 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:151:
4883
4884 Tyr Cys Val Glu Gly Thr Pro Ile Asn Phe Ser Thr Ala Thr Ser Leu
4885 1 5 10 15
4886 Ser Asp Leu Thr
4887 20
4888

4889 (2) INFORMATION FOR SEQ ID NO:152:
4890
4891 (i) SEQUENCE CHARACTERISTICS:
4892 (A) LENGTH: 20 amino acids
4893 (B) TYPE: amino acid
4894 (D)
4895 (ii) MOLECULE TYPE: protein
4896
4897 (vi) ORIGINAL SOURCE:
--> 4898 (A) Homo sapiens
4899
--> 4900 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:152:
4901
4902 Thr Pro Ile Glu Gly Thr Pro Tyr Cys Phe Ser Arg Asn Asp Ser Leu
4903 1 5 10 15
4904 Ser Ser Leu Asp
4905 20
4906

4907 (2) INFORMATION FOR SEQ ID NO:153:
4908
4909 (i) SEQUENCE CHARACTERISTICS:
4910 (A) LENGTH: 20 amino acids
4911 (B) TYPE: amino acid
4912 (D)
4913 (ii) MOLECULE TYPE: protein
4914
4915 (vi) ORIGINAL SOURCE:
--> 4916 (A) Homo sapiens
4917
--> 4918 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:153:

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INPUT SET: S37023.raw

4919
4920 Phe Ala Ile Glu Asn Thr Pro Val Cys Pro Ser His Asn Ser Ser Leu
4921 1 5 10 15
4922 Ser Ser Leu Ser
4923 20
4924

4925 (2) INFORMATION FOR SEQ ID NO:154:

4926

4927 (i) SEQUENCE CHARACTERISTICS:

4928 (A) LENGTH: 20 amino acids

4929 (B) TYPE: amino acid

4930

4931 (ii) MOLECULE TYPE: protein

4932

4933 (vi) ORIGINAL SOURCE:

--> 4934 (A) Homo sapiens

4935

--> 4936 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:154:

4937

4938 Arg His Val Glu Asp Thr Pro Val Cys Phe Ser Arg Asn Ser Ser Leu

4939 1 5 10 15

4940 Ser Ser Leu Ser

4941 20

4942

--> 4943 ?? delete

4944

4945

4946

4947

4948

4949

4950

4951

4952

4953

4954